

ABSTRACT OF THE DISCLOSURE

5 A method of applying polyacrylamide (PAM) for stabilizing
soil particles of a land area from movement about the land area.
The slope of the surface of the soil is measured, and a tentative
application rate is determined based upon the slope of the land
area. The stability of the soil of the land area is determined by
10 placing a sample of the soil in a tray and pouring a liquid over the
sample and evaluating the erosion potential of the soil by
measuring any movement of the soil in the liquid. The liquid may
be water or a mixture of water and PAM. The application rate may
be increased above the tentative application rate if the soil sample
showed a relatively higher vulnerability to erosion. An application
15 rate is calculated for applying a mixture of PAM and water to the
land area. The mixture is misted onto the surface of the land area
in one or more mixture applications. An application of the mixture
is continued until the top surface of the soil of the land area
becomes saturated. Further mixture applications occur after any
20 puddles of the mixture on the surface of the soil have been
absorbed into the soil, but the surface of the soil is not permitted to
dry. A spray of the mixture is directed onto the surface of the soil
of the land area from at least four directions, and at a substantially
perpendicular angle downward onto the surface of the soil of the
25 land area. The extent of penetration of the mixture below the top
surface of the soil of the land area is tested, and the mixture
application is continued until a desired penetration of the PAM
below the top surface of the soil is achieved.